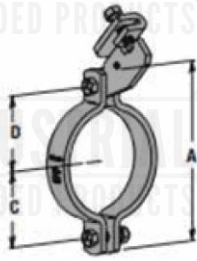




FIG. 4LA
"In-Line" Sway Brace Attachment



The diagram represents pipe sizes for 1" through 4"

Material: Steel
Finish: Plain, Electro-Galvanized.
Service: For bracing pipe against sway and seismic disturbance.
Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL) 1" (25mm) through 10" (250mm) pipe. Approved Factory Mutual Engineering (FM) 1" (25mm) through 12" (300mm) pipe.
Ordering: Figure number, pipe size, and finish.

Pipe Size	A		C		D		Bolt Size	Approximate Wgt/100 in (mm)
	in (mm)	in mm	in mm	in mm	in mm			
1 (25)	3 ^{-19/32}	91.2	1 ^{-5/16}	33.5	1 ^{-5/16}	33.5	3/8"-16	119 (54.0)
1-1/4 (32)	3 ^{-29/32}	99.3	1 ^{-3/8}	35.3	1 ^{-3/8}	35.3	3/8"-16	123 (55.8)
1-1/2 (40)	4 ^{-5/32}	105.7	1 ^{-1/2}	38.5	1 ^{-1/2}	38.5	3/8"-16	127 (57.6)
2 (50)	5 ^{-11/32}	135.6	2 ^{-1/32}	51.9	2 ^{-1/16}	51.9	3/8"-16	142 (64.4)
2-1/2 (65)	6 ^{-1/2}	148.7	2 ^{-5/16}	58.5	2 ^{-5/16}	58.5	3/8"-16	173 (78.5)
3 (80)	5 ^{-27/32}	164.9	2 ^{-5/8}	66.6	2 ^{-5/8}	66.6	3/8"-16	187 (84.8)
3-1/2 (90)	7 ^{-13/32}	188.1	2 ^{-7/8}	73.1	2 ^{-7/8}	73.1	3/8"-16	198 (89.8)
4 (100)	7 ^{-17/32}	191.3	3 ^{-1/8}	79.5	3 ^{-1/8}	79.5	3/8"-16	209 (94.8)
5 (125)	8 ^{-1/4}	222.3	3 ^{-5/8}	92.1	3 ^{-5/8}	92.1	1/2"-13	298 (135.2)
6 (150)	10 ^{-5/8}	269.9	4 ^{-9/16}	115.9	4 ^{-9/16}	115.9	1/2"-13	521 (236.3)
8 (200)	12 ^{-13/16}	325.5	5 ^{-9/16}	143.7	5 ^{-21/32}	143.7	1/2"-13	629 (285.3)
10 (250)	16 ^{-1/2}	419.1	7 ^{-1/4}	184.2	7 ^{-1/4}	184.2	1/2"-13	1320 (598.7)
12 (300)	18 ^{-1/2}	469.9	8 ^{-1/4}	309.6	8 ^{-1/4}	309.6	1/2"-13	1496 (678.6)

(additional charts on the following page)



FIG. 4LA "In-Line" Sway Brace Attachment
(continued from previous page)

Longitudinal Loads Pipe Size in (mm)	Max Horizontal Design Load (UL) lbs (kN)	Max Horizontal Design Load (FM)							
		30-44 degrees		45-59 degrees		60-74 degrees		75-90degrees	
		Lbs	kN	Lbs	kN	Lbs	kN	Lbs	kN
1 (25)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
1-1/4 (32)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
1-1/2 (40)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
2 (50)	1000 (4.45)	680	3.02	860	3.82	1030	4.58	1320	5.87
2-1/2 (65)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
3 (80)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
3-1/2 (90)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
4 (100)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
5 (125)	1600 (7.11)	-	-	-	-	-	-	-	-
6 (150)	1600 (7.11)	1620	7.20	2260	10.05	2010	8.94	2220	9.87
8 (200)	2015 (8.96)	1620	7.20	1660	7.38	1570	6.98	1740	7.74
10 (250)	2765 (12.30)	1620	7.20	1660	7.38	1570	6.98	1740	7.74
12 (300)	--	1620	7.20	1660	7.38	1570	6.98	1740	7.74

Lateral Loads Pipe Size in (mm)	Max Horizontal Design Load (UL) lbs (kN)	Max Horizontal Design Load (FM)							
		30-44 degrees		45-59 degrees		60-74 degrees		75-90degrees	
		Lbs	kN	Lbs	kN	Lbs	kN	Lbs	kN
1 (25)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
1-1/4 (32)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
1-1/2 (40)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
2 (50)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
2-1/2 (65)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
3 (80)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
3-1/2 (90)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
4 (100)	1000 (4.45)	680	3.02	970	4.31	1190	5.29	1320	5.87
5 (125)	1600 (7.11)	-	-	-	-	-	-	-	-
6 (150)	1600 (7.11)	1620	7.20	2300	10.23	2820	13.96	3140	13.96
8 (200)	2015 (8.96)	1620	7.20	2300	10.23	2820	13.96	3140	13.96
10 (250)	2765 (12.30)	1620	7.20	2300	10.23	2820	13.96	3140	13.96
12 (300)	--	1620	7.20	2300	10.23	2820	13.96	3140	13.96

Project Information		Approval Stamp
Project:		Notes:
Address:	Contractor:	
Date:	Engineer:	
Approved <input type="checkbox"/>	Approved as Noted <input type="checkbox"/>	Not Approved <input type="checkbox"/>